

REPORT ON OIL ENGINE MACHINERY.

No. 12206

Received at London Office FEB - 1 1939

Date of writing Report 25th January 1939 When handed in at Local Office 30th Jan. 1939 Port of **GOTHENBURG.**

No. in Survey held at **GOTHENBURG** Date, First Survey 25th May 1938 Last Survey 26th January 1939
Number of Visits 87.

Supplement **Single**
90505 on the **Twin** Screw vessel **M/S VENEZUELA** Tons { Gross 6991
 Triple
 Quadruple } Net 4060

Built at **GOTHENBURG** By whom built **A.B. GÖTAVERKEN** Yard No. 530 When built 1939.

Engines made at **GOTHENBURG** By whom made **A.B. GÖTAVERKEN** Engine Nos. 1354 When made 1939.

Donkey Boilers made at **LOUGHBOROUGH** By whom made **WALTER W. COLTMAN & Co. Ltd.** Boiler No. 6262 When made 1938.

Brake Horse Power **2 x 2700** Owners **REDERIAKTIEBOL. NORDSTJERNAN** Port belonging to **STOCKHOLM.**

Nom. Horse Power as per Rule **945** Is Refrigerating Machinery fitted for cargo purposes **YES** Is Electric Light fitted **YES**

Trade for which vessel is intended **GENERAL** 24¹³/₁₆ 57³/₁₆

OIL ENGINES, &c.—Type of Engines **Crosshead Supercharged Diesel Oil Engines** 2 or 4 stroke cycle **4** Single or double acting **Single**

Maximum pressure in cylinders **45 kgs/cm²** Diameter of cylinders **630 mm.** Length of stroke **130 mm.** No. of cylinders **2 x 8** No. of cranks **2 x 8**

Mean Indicated Pressure **7.6 kgs/cm²** Span of bearings, adjacent to the Crank, measured from inner edge to inner edge **892 mm.** Is there a bearing between each crank **Yes**

Revolutions per minute **125** Flywheel dia **None** Weight **—** Means of ignition **Compression** Kind of fuel used **Diesel Oil**

Crank Shaft, { Solid forged dia. of journals **430 mm.** Crank pin dia. **430 mm.** Crank Webs Mid. length breadth **shrunk** Thickness parallel to axis **266 mm.**
 { Semi built dia. of journals **430 mm.** with 150 mm. central hole. Mid. length thickness **shrunk** Thickness around eyehole **195 mm.**
 { All built as fitted **430 mm.**

Flywheel Shaft, diameter as per Rule **295 mm.** Intermediate Shafts, diameter as fitted **310 mm.** Thrust Shaft, diameter at collars as per Rule **307 mm.** as fitted **345 mm.**

Tube Shaft, diameter as per Rule **336 mm.** Is the tube screw shaft fitted with a continuous liner **No.** as fitted **365 mm.**

Bronze Liners, thickness in way of bushes as per Rule **—** Thickness between bushes as per Rule **—** Is the after end of the liner made watertight in the propeller boss **—** as fitted **—**

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner **—**

If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive **—**

If two liners are fitted, is the shaft lapped or protected between the liners **—** Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft **Yes** If so, state type **Cedervall's Oil Glands** Length of Bearing in Stern Bush next to and supporting propeller **1825 mm.**

Propeller, dia. **4100 mm.** Pitch **4260 mm.** No. of blades **3** Material **Bronze** whether Moveable **Not** moveable Total Developed Surface **5.5 M²** each sq. feet

Method of reversing Engines **Direct with comp. air** Is a governor or other arrangement fitted to prevent racing of the engine when declutched **Yes** Means of lubrication **Forced** Thickness of cylinder liners **46-36 mm.** Are the cylinders fitted with safety valves **Yes** Are the exhaust pipes and silencers water cooled or lagged with non-conducting material **Lagged** If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine **Led to a funnel**

Cooling Water Pumps, No. **Two** : **5000 lit/min each** Is the sea suction provided with an efficient strainer which can be cleared within the vessel **Yes**

Bilge Pumps worked from the Main Engines, No. **One** Diameter **130 mm.** Stroke **230 mm.** Can one be overhauled while the other is at work **—**

Pumps connected to the Main Bilge Line { No. and Size 1 ballast 150 tons/h. 1 bilge 20 tons/h. 1 plunger 20 tons/h. 1 emergency 60 tons/h. 1 transfer pump 50 tons/h.
How driven **electric motor** | **electric motor** | **sthd. main engine** | **electric motor** | **electric motor**

Is the cooling water led to the bilges **No** If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements **—**

Ballast Pumps, No. and size **One** : **150 tons/h.** Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size **Four** : **60 m³/h each.**

Are two independent means arranged for circulating water through the Oil Cooler **Yes** Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Machinery Spaces **2x3" & 2x2 1/2"**; From thrust bearing recess **2x2 1/2"**; From tunnel well **1x3"**; From cofferdams **1x2 1/2"** In Pump Room **—**

In Holds, &c. Held No.1-2x3"; No.2-2x3"; No.3-2x3"; No.4-4x3"; No.5-3x3" and from cofferdams between frames Nos.29 & 30 and Nos.38 & 39 each **1x2"**

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size **1x6" ft. ballast p.; 1x3" ft. sep. bilge p.; 1x3" ft. dir. dr. bilge p. & 1x3 1/2" ft. emergency p.**

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes **Yes** Are the Bilge Suctions in the Machinery Spaces led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges **Yes**

Are all Sea Connections fitted direct on the skin of the ship **Yes** Are they fitted with Valves or Cocks **Yes**

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates **Yes** Are the Overboard Discharges above or below the deep water line **Above**

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel **Yes** Are the Blow Off Cocks fitted with a spigot and brass covering plate **Yes**

What pipes pass through the bunkers **No coal bunkers** How are they protected **—**

What pipes pass through the deep tanks **No deep tanks** Have they been tested as per Rule **—**

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times **Yes**

Is the arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another **Yes** Is the Shaft Tunnel watertight **Yes** Is it fitted with a watertight door **Yes** worked from **top platform.**

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork **—**

Manufacturing Main Air Compressors, No. **Two** No. of stages **Two** Diameters **350 & (350-310)** Stroke **160 mm.** Driven by **Electric motor**

Auxiliary Air Compressors, No. **—** No. of stages **—** Diameters **—** Stroke **—** Driven by **—**

Small Auxiliary Air Compressors, No. **One** No. of stages **Two** Diameters **106 & 34 mm.** Stroke **80 mm.** Driven by **Steam engine**

What provision is made for first Charging the Air Receivers **by the steam engine driven air compressor (above)**

Supercharging Scavenging Air Pumps, No. **Two** Diameter **950 mm.** Stroke **800 mm.** Driven by **main engines.**

Auxiliary Engines crank shafts, diameter as per Rule **163 mm.** No. **Four** Position **Two on port, and two on abtd. side in the engine room.** as fitted **190 mm.** Is a report sent herewith **Yes.**

Have the Auxiliary Engines been constructed under special survey **Yes**

50-8-37. J.

W1178-6109

© 2021 Lloyd's Register Foundation

